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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/668,587	09/23/2003	David M. Hoffman	134184CT	2434
26946	7590	03/13/2006	EXAMINER	
JOSEPH S. HEINO, ESQ. 111 E. KILBOURN AVENUE SUITE 1400 MILWAUKEE, WI 53202			VU, MINDY D	
			ART UNIT	PAPER NUMBER
			2884	

DATE MAILED: 03/13/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/668,587

Applicant(s)

HOFFMAN, DAVID M.

Examiner

Mindy Vu

Art Unit

2884

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 16 January 2006.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1,5,9-11,15-17 and 21 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1,5,9-11,15-17 and 21 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 16 January 2006 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

This Office Action is in response to the Applicant's amendment filed January 16, 2006.

Drawings

The drawings were received on January 16, 2006. These drawings are acceptable.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claim 1 is rejected under 35 U.S.C. 102(b) as being anticipated by Hu et al. (5,510,622).

With respect to Claim 1, Hu et al. discloses a multislice detector array 16 for a CT system (for example Fig. 3A) comprising: a plurality of detector modules 18; the detector modules 18 being comprised of a plurality of detector elements 18A & 18B along both an X-axis and a Z-axis; detector elements in the Z-direction being coupled together, the coupled detector elements being arranged in a staggered pattern 40 throughout the detector module.

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Claims 5, 9-11 and 21 are rejected under 35 U.S.C. 102(b) as being anticipated by Hoffman (US 2002/0085108).

With respect to Claim 5, Hoffman discloses a method for sampling for use with a CT system (Abstract) comprising: providing a plurality of detector arrays (Fig. 6) in a detector module in a CT system; providing a plurality of detector elements 20 in a detector array 18 (Paragraph 0016); connecting an FET array to the detector elements electronically (Paragraph 0023), determining the number of slices required and the thickness of each slice (Paragraph 0025), and staggering the coupled detector elements in the Z-axis throughout the detector module (Paragraph 0028).

With respect to Claim 9, Hoffman discloses a detector module 50 for use in a computed tomography machine, said detector module apparatus comprising: a plurality of detector elements 20; a switching array 60 electrically connected to the detector elements; a decoder 62 electronically connected to the switching array; said decoder coupling adjacent detector elements in the Z-axis and staggering the coupled detector elements throughout the detector array (Paragraphs 0019 & 0028).

With respect to Claim 10, Hoffman discloses wherein the switching array comprises a plurality of field effect transistors, wherein each field effect transistor has an input, an output, and a control line (Paragraph 0021).

With respect to Claim 11, Hoffman discloses the decoder controls the switching array to combine outputs of the detector elements (Paragraph 0024).

With respect to Claim 21, Hoffman discloses a method for summing outputs from a detector array in a multislice CT system (Paragraph 0031), having an array of scintillators optically coupled to an array of diodes (Paragraph 0019), said method comprising summing adjacent detector elements coupled together along the Z-axis and staggered through the detector array (Fig. 5).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 15-17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hoffman (US 2002/0085108) in view of Mattson et al. (6,426,991).

With respect to Claims 15 and 16, Hoffman discloses the detector module for a CT system comprising: a scintillator array; a photodiode array optically coupled to said scintillator array; a switching array electrically connected to the photodiode array; a decoder electronically connected to the switch array, said decoder being configured to control operation of said switch apparatus to combine data signals from adjacent detector elements coupled together and staggered in the Z-axis throughout a detector array (See Paragraphs 0020, 0021, & 0024). Hoffman lacks to disclose a collimator array. Mattson et al. discloses a collimator for a CT system (Col. 7 lines 28-31). It would

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have been obvious to one of ordinary skill in the art at the time of the invention was made to include a collimator array in a CT system for improvement in imaging system.

With respect to Claim 17, Hoffman discloses wherein the switching array comprises a plurality of field effect transistors, wherein each field effect transistor has an input, an output, and a control line (Paragraph 0021).

Response to Arguments

Applicant's arguments filed January 16, 2006 have been fully considered but they are not persuasive.

Hu et al. (5,510,622) discloses the detector elements being coupled and staggered along the z-axis (Fig. 3A) and not an array of individual detector elements results. Based on the dictionary (www.dictionary.com), coupled means something that joins or connects two things together or a link. Therefore, the detector elements of Hu et al. are attached to each other on the same substrate and so they are coupled.

In response to applicant's argument that the references fail to show certain features of applicant's invention, it is noted that the features upon which applicant relies (i.e., the present invention combines the signal generated from coupled adjacent detector elements) are not recited in the rejected claim(s). Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993).

Conclusion

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).


A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Mindy Vu whose telephone number is 571-272-8539. The examiner can normally be reached on M-F 9am - 5:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Dave Porta can be reached on 571-272-2444. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

mv



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